MALLS Sample Preparation

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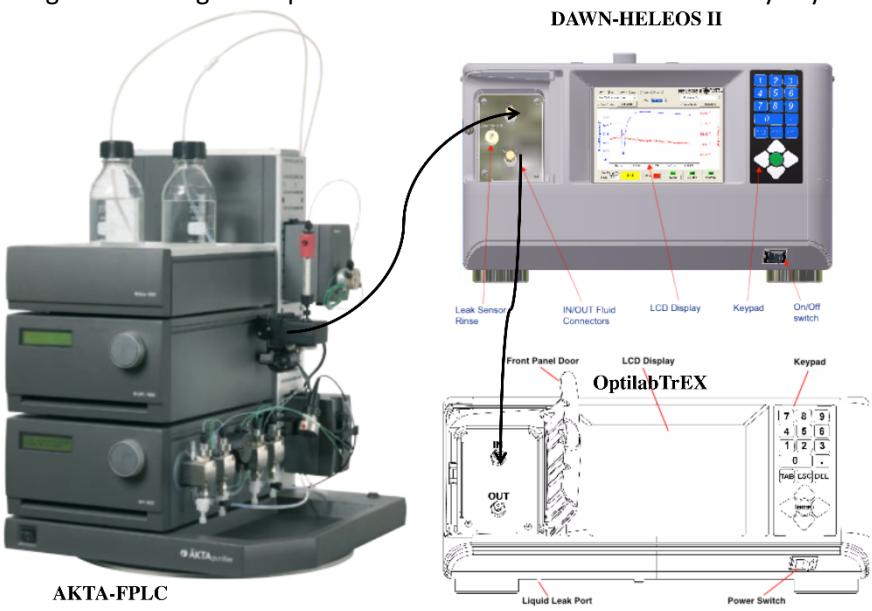
Preparation for the experiment

You need to start the preparation one day before the experiment, as the column needs to be equilibrated overnight in the buffer.

Our system

Our MALLS system consists of an ÄKTA Purifier chromatography system connected to an 8 detector DAWN-HELEOS II light scattering and Optilabs TrEX refractive index detectors by Wyatt.



Buffers

If you are analysing several proteins then 2 litres of buffer will be needed, otherwise 1 litre will do. You will also need 500 ml - 1 litre of MilliQ water.

Buffer and water must be freshly made, super clean and filtered through 0.22 µm filters. Glassware and measuring cylinders should be washed thoroughly with MilliQ water before using.

You should avoid β-mercaptoethanol at high concentrations (>10 mM) and DTT, which probably oxidises overnight. If you need reducing agent, use TCEP.

Glycerol can be only be used at less than 5 %.

Sample

For each experiment, you'll need 70-80 µl of 2 mg/ml for proteins of 50-60 kDa, 3 mg/ml if MW is closer to 20 kDa and 1.5 mg/ml if 100 kDa or more.